~~SECRET~~

[redacted]

SCB-1570
Copy 9

15 March 1962

MEMORANDUM FOR THE RECORD

SUBJECT: CORONA Post Flight Data Requirements

1. PURPOSE: To record the action being taken as a result of an informal meeting held at NPIC on 13 March 1962 to discuss the data requirements between LMSC to NPIC.

2. ATTENDANCE:

[redacted]
DD/DPD
NPIC
NPIC
LMSC

3. DESCRIPTION OF DATA: The following items are currently being exchanged between LMSC and NPIC (in addition to the [redacted] series of messages):

a. Instrument Data Book: A tabulation of calibration of instruments, flight performance estimates, and pertinent flight information. This data is used primarily as reference and backup for data transmitted by [redacted] during flight. The book must be hand carried to customer offices. This book is the primary data for the users, and must therefor be both complete and accurate.

b. Preliminary Ephemeris and Performance Estimate: A single copy of the printed ephemeris compiled from the twice daily ephemeris computed during the flight for the next twelve hours of flight; this is the best available ephemeris at Recovery plus 1 day.

(1) The performance estimate is a tabulation of the geo-position of the instrument operations during the flight, exposure times, number of frames per pass, and other pertinent data to assist processing.

(2) This data is turned over to Lt. Col. Murphy by LMSC and NPIC feels it can now make this item a part of the [redacted] series. Mr. [redacted] will coordinate this requirement with Lt. Col. [redacted]

~~SECRET~~

[redacted]

c. Best Guess Ephemeris: Two copies, including one reproducible, are supplied, of the standard STC listing of the final ephemeris that is normally generated, after critical evaluation of all radar tracking data. Ephemeris is at one minute or five minute intervals from injection to separation. The listings are individually bound in Acco-Press binders.

d. Evaluation of Best Guess Ephemeris: Two copies, including one reproducible, are supplied. The evaluation is an estimate, based on internal consistencies and quality of the radar fits, of the probable errors in the best guess ephemeris. The evaluation is bound with the Best Guess Ephemeris. (See Para. 3c)

e. Card Ephemeris: Based on time readings of individual frames, a single copy of the ephemeris is generated; one set of data for each frame. The output consists of IBM cards in an agreed format; each card contains pertinent data for one frame. In event of poor time data on recovered material, an estimate is made of the frame time, and equivalent data is presented. Ephemeris to be compatible with the Best Guess Ephemeris. Hand carried to Hq.

f. Final Ephemeris: At such times as LMSC produces ephemerides having lesser estimated errors, they can supply duplicates of the Best Guess Ephemeris, Evaluation of Best Guess, and the Card Ephemeris. The availability of this improvement is uncertain at the present and is above the current scope of data exchange. Also applications of tape exchange in lieu of card decks is dependent upon further development of "in-house" NPIC capabilities and additional coordination.

4. CURRENT SCHEDULE:

a. Instrument Data Book: Due to be ready at LMSC on recovery plus one day. Will be shipped with the material by one of the couriers to E.K. and turned over to the NPIC "Team Captain" at E.K. for first phase read-out for return to NPIC in Washington. This way it should arrive at NPIC several days ahead of the first priority duplicates of the mission and save having to send by special courier.

b. Preliminary Ephemeris: Due to be ready at LMSC on recovery plus one day and can be sent by [redacted]

c. Best Guess Ephemeris and Evaluation of The Best Guess: Due to be ready at LMSC at recovery plus five days. This should beat NPIC at least by the time the first "take" arrives from [redacted] Since this data is "white" and unclassified it is sent via registered mail to NPIC through "black" mail channels. This data is handled as "Confidential" by the [illegible] until recovery plus one hour, then it is downgraded to "Unclassified." The only problem in [illegible] of this information, and it is felt that the U. S. mail system is adequate protection. This saves a courier and insures timely arrival in Washington.

d. Card Ephemeris. This data is generated at NPIC on card decks and sent to LMSC for verification and correlation. With a good clock (time correlation) and readability, this deck can be ready for return to NPIC about three days after receipt by LMSC. With poor clock or readability, this deck will be ready for return to NPIC about 10 days after receipt by LMSC. No set procedure has been established for transmitting these card decks, but rather I believe they have been mailed from Hqs. to LMSC, but (when the data is correlated with the ephemeris) it is held at LMSC until someone is going to Washington. It is felt that this is all right, within reason, but emphasis should be placed on the package to insure that it is sent back to Hq. within about 48 hours of its being ready for shipment.

3. RECOMMENDED ACTIONS

a. [illegible] sent a message to [illegible] on 25 March [illegible] requesting inclusion of calibration data on the framing camera into the Instrument Data Book. This to be available at LMSC by launch day of each mission.

b. [illegible] (in coordination with Security, [illegible] and NPIC) sent a message to LMSC, with info to [illegible], requesting that the Instrument Data Book be shipped in accordance with paragraph 4a.

c. NPIC plans to review the Preliminary Ephemeris data with [illegible] and incorporate this report into the [redacted] Series. If it turns out to be too long for convenient transmission, registered air mail should suffice. Action should be between NPIC, [illegible] and Security.

d. Security should take action, as required, to insure that the Card Ephemeris is not delayed in shipment for an excessive time. I suggest that Security review the present card decks with [illegible] [redacted] in case it may be possible to permit transmitting these items via registered air mail as "black" data.

[redacted]

This would relieve the counter problem completely. I feel sure that when we change from cards to tape this is easily adequate protection.

6. DD/SS plans no further action in this area.

[redacted]

[redacted]